


Illustrated Parts & Service Map

HP Pro 3015 Business PC Microtower Chassis



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Key Specifications

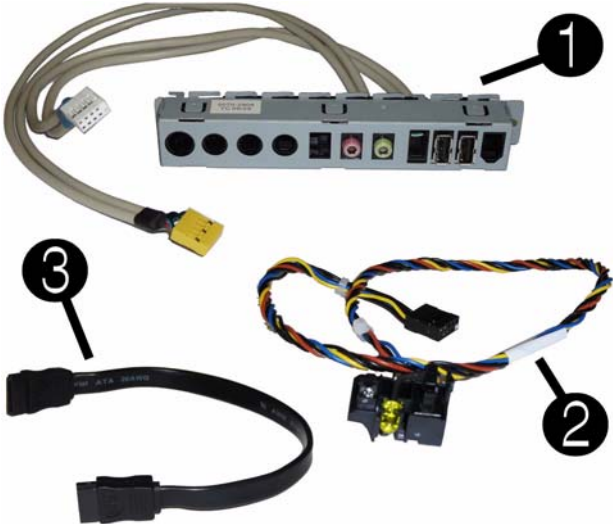
| | |
|-----------------------|--|
| Processor Type | AMD Phenom™ II X3/X4 multi-core, AMD Athlon™ II X2/ X3/X4 multi-core, AMD Sempron™ |
| RAM Type | DDR3-SDRAM DIMMs, PC2-10600 (1333 MHz) non-ECC |
| Maximum RAM Supported | 8 GB |
| Expansion Slots | <ul style="list-style-type: none">• (1) PCI 2.3• (2) PCIe-x1• (1) PCIe-x16 |
| Graphics Adapter | NVIDIA GeForce 9100 graphics controller with DX10 support |
| Chipset | NVIDIA MCP78OV |
| Drive Support | <ul style="list-style-type: none">• (2) external 5.25-inch optical disk drives• (1) external 3.5-inch drive (for optional media reader)• (2) internal 3.5-inch hard disk drives |
| I/O Interfaces | Front: (2) USB 2.0 ports, headphone output, microphone jack Rear: (6) USB 2.0 ports, serial port, RJ-45 network interface, DVI-D and VGA video interfaces, microphone jack, audio in/ out jacks, 1394, digital audio out, audio rear center/sub, sur- round rear, surround side |
| Operating Systems | <ul style="list-style-type: none">• Windows 7• Windows Vista• Windows XP Professional• SuSE Linux Enterprise Desktop 11• FreeDOS |

Spare Parts



System Unit

| | | |
|---|------------------------------------|------------|
| 1 | Access panel | 586372-001 |
| 2 | Power supply, 300W, PFC, EMEA only | 463317-001 |
| 3 | Chassis | not spared |
| 4 | Front bezel | 591599-001 |
| * | 5.25-inch bezel blank | 536306-001 |
| * | 3.5-inch bezel blank | 583094-001 |



| Cables | | |
|--------|--|------------|
| 1 | Front I/O assembly | 508463-001 |
| 2 | Power switch/LED assembly | 508464-001 |
| 3 | SATA cable, 8.66-inch (22-cm), 2 straight ends | 591600-001 |
| * | SATA hard drive cable with latch, 6.5 inch | 448670-001 |
| * | SATA power dongle, 4 inch | 449283-001 |
| * | DMS-59 to dual VGA cable | 463023-001 |

*Not shown

Keyboards (not illustrated)

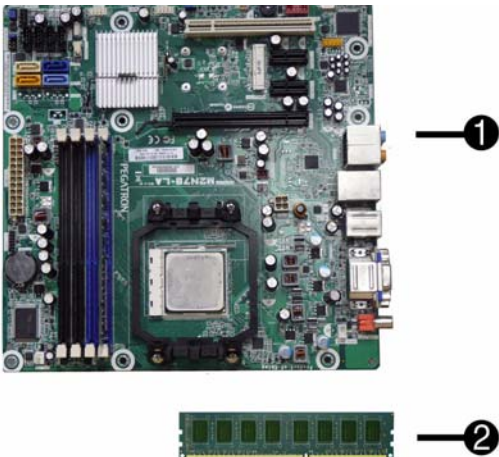
| | | | |
|-----------------------|------|-------------------|------|
| USB, Standard | | 537746-xxx | |
| USB SmartCard | | 537747-xxx | |
| USB, Mini[d] | | 535873-xxx | |
| USB, low cost | | 537924-xxx | |
| Adriatic[e] | -BL1 | Italian | -061 |
| Arabic[b][c] | -171 | Japanese[a] | -291 |
| Belgian | -181 | Korean | -KD1 |
| BHCSY[b] | -B41 | Norwegian | -091 |
| Czech | -221 | Portuguese | -131 |
| Danish | -081 | Romanian | -271 |
| Finnish | -351 | Russian | -251 |
| French[b] | -051 | S. Chinese[a] | -AA1 |
| French Arabic | -DE1 | Slovakian | -231 |
| French Canadian[a] | -121 | Spanish | -071 |
| German | -041 | Swedish | -101 |
| Greek | -151 | Swiss | -111 |
| Hebrew[b] | -BB1 | Taiwanese[a] | -AB1 |
| Hong Kong | -AC1 | Thailand[a] | -281 |
| Hungarian | -211 | Turkish | -141 |
| Iceland[a][c] | -DD1 | U.K. | -031 |
| International English | -L31 | United States[a] | -001 |

[a] not for 537924-xxx
[b] not for 537747-xxx

[c] not for 537746-xxx
[d] 535873-xxx only for -201, -AA1, L31

Mass Storage Devices (not illustrated)

| | |
|---|------------|
| Blu-ray Disc ROM with SuperMulti DVD±R/RW DL Drive | 581601-001 |
| DVD±RW and CD-RW SuperMulti DL Combo Drive with LightScribe | 581600-001 |
| DVD-ROM drive | 581599-001 |
| 500 GB SATA hard drive, | 586720-001 |
| 250 GB SATA hard drive | 586719-001 |
| 250-GB external USB hard drive | 586383-001 |
| 160 GB SATA hard drive | 586718-001 |



Standard and Optional Boards

| | | |
|--|---|------------|
| System boards with thermal grease, alcohol pad, and CPU socket cover | | |
| 1 | System board | 583366-001 |
| Memory modules (PC3-10600, CL9) | | |
| 2 | 1 GB | 576109-001 |
| * | 2 GB | 576110-001 |
| * | 4 GB | 585157-001 |
| Other boards | | |
| * | Agere International 56K LSI v92 modem, includes bracket | 490689-001 |
| * | ATI Radeon HD4550 (RV710) PCIe x16 graphics card, 512 MB, 39 month warranty - APJ only | 596113-001 |
| * | ATI Radeon HD4550 (RV710) PCIe x16 graphics card, 512 MB, 15 month warranty - EMEA only | 586750-001 |
| * | ATI Radeon HD4650 (RV730) PCIe x16 graphics card, 1 GB, 39 month warranty, APJ only | 596114-001 |
| * | ATI Radeon HD4650 (RV730) PCIe x16 graphics card, 1 GB, 15 month warranty, EMEA only | 578174-001 |
| * | Nvidia Quadro NVS4100 512-MB PCIe graphics card | 589145-001 |
| * | GeForce GT230 1.5-GB PCIe graphics card | 586381-001 |
| * | Intel Gigabit NIC, includes bracket | 490367-001 |
| * | HP FireWire IEEE 1394 PCI card, FH | 515182-001 |

AMD Athlon II X2 processors with alcohol pad and thermal grease:

| | | |
|---|--|------------|
| * | X4 630, quad core, 2-MB L2 cache, 2.8 GHz | 586735-001 |
| * | X3 435, quad core, 2-MB L2 cache, 2.9 GHz | 586733-001 |
| * | X3 425, quad core, 2-MB L2 cache, 2.7 GHz | 586732-001 |
| * | X2 250, dual core, 2-MB L2 cache, 3.0 GHz | 584221-001 |
| * | X2 245, dual core, 2-MB L2 cache, 2.9 GHz | 586731-001 |
| * | X2 240, dual core, 2-MB L2 cache, 2.8 GHz | 584222-001 |
| * | X2 215, dual core, 2-MB L2 cache, 2.75 GHz | 586730-001 |

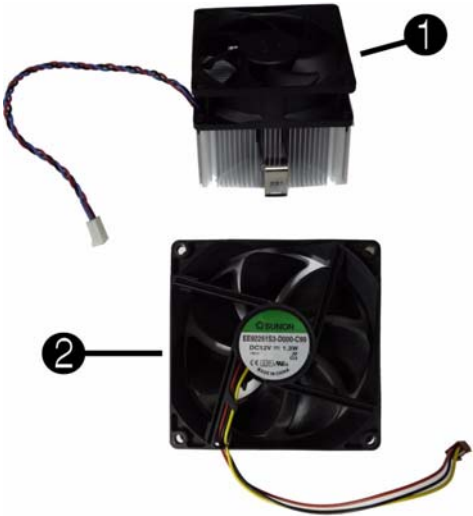
AMD Phenom II processors with alcohol pad and thermal grease:

| | | |
|---|---|------------|
| * | X4 B95, quad core, 2-MB L2 cache, 3.0 GHz | 585156-001 |
| * | X4 945, quad core, 2-MB L2 cache, 3.0 GHz | 586741-001 |
| * | X4 925, quad core, 2-MB L2 cache, 2.8 GHz (6-MB L3 cache) | 584219-001 |
| * | X4 820, quad core, 2-MB L2 cache, 2.8 GHz (4-MB L3 cache) | 586739-001 |
| * | X3 740, triple core, 1.5-MB L2 cache, 3.0 GHz | 586737-001 |
| * | X3 720, triple core, 1.5-MB L2 cache, 2.8 GHz | 581073-001 |
| * | X2 550, dual core, 1-MB L2 cache, 3.1 GHz | 580749-001 |
| * | X2 545, dual core, 1-MB L2 cache, 3.0 GHz | 584220-001 |

AMD Sempron processors with alcohol pad and thermal grease:

| | | |
|---|--|------------|
| * | 140, single core, 1-MB L2 cache, 2.7 GHz | 590132-001 |
|---|--|------------|

* Not shown

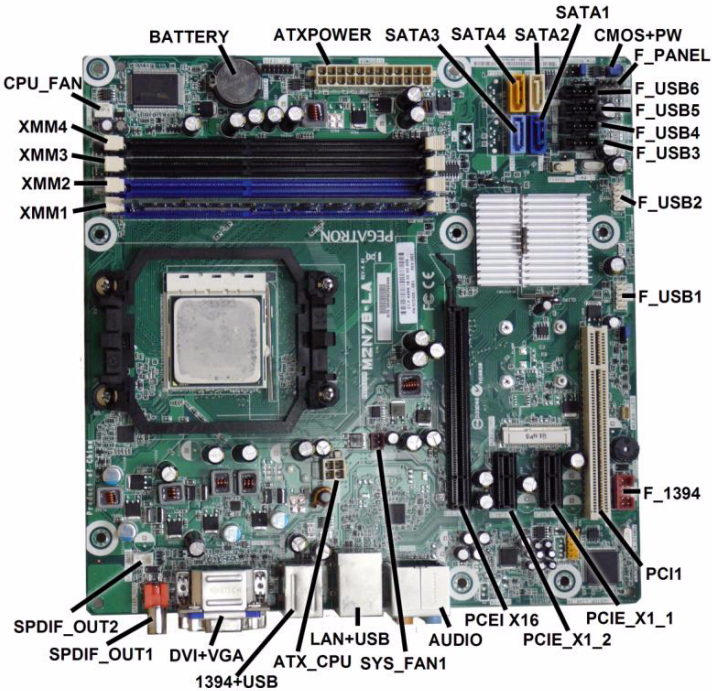


Miscellaneous Parts

| | | |
|---|--|------------|
| 1 | Heatsink with alcohol pad and factory-applied thermal grease | 591594-001 |
| 2 | Chassis fan | 449207-001 |
| * | Media card reader | 480032-001 |
| * | PCI slot cover | 580507-001 |
| * | USB powered speakers | 571536-001 |
| * | Foot kit | 530593-001 |
| * | Mouse, optical | 537748-001 |
| * | Mouse, laser | 570580-001 |

*Not shown

System Board



System Board Connectors and Jumpers (component location may vary)

| | | | |
|----------|-----------------------------|------------|---|
| BATTERY | Battery slot | PCIE_X1_1 | PCIe X1,slot 1 |
| ATXPOWER | Main power connector | PCIE_X1_2 | PCIe X1, slot 2 |
| SATA3 | 2nd SATA hard drive | PCIE_X16 | PCIe X16 slot |
| SATA4 | 2nd SATA optical drive | AUDIO | Double stack audio connector |
| SATA2 | 1st SATA optical drive | SYS_FAN1 | Rear fan connector |
| SATA1 | Primary SATA hard drive | LAN+USB | Stacked RJ-45/Double USB connectors |
| CMOS+PW | CMOS/Password header | ATX_CPU | CPU power connector |
| F_PANEL | Front panel connector | 1394+USB | Stacked 1394/Double USB connector |
| F_USB6 | 4th USB header | DVI+VGA | Stacked DVI/VGA connector |
| F_USB5 | 3rd USB header | SPDIF_OUT1 | Digital line-in/line-out audio connector (external) |
| F_USB4 | 2nd USB header | SPDIF_OUT2 | Digital line-in/line-out audio connector (internal) |
| F_USB3 | 1st USB header | XMM1 | Memory socket 1 |
| F_USB2 | Media card reader connector | XMM2 | Memory socket 2 |
| F_USB1 | Front I/O USB connector | XMM3 | Memory socket 3 |
| F_1394 | 1394 connector | XMM4 | Memory socket 4 |
| PCI1 | PCI 2.3 slot | CPU FAN | CPU/heat sink fan connector |

POST Audible Codes

| Beeps | Meaning | Recommended Action |
|--|--|--|
| 1 short beep and 1 long beep followed by a three second pause | Bad memory or memory configura-tion error. | Check that the memory modules have been installed correctly and that proper modules are used. |
| 2 short beeps and 1 long beep followed by a three second pause | No graphics card installed or graphics card initialization failed. | For systems with a graphics card: 1. Reseat the graphics card. Power on the system. 2. Replace the graphics card. 3. Replace the system board. For systems with integrated graphics, replace the system board. |
| 3 short beeps and 1 long beep followed by a three second pause | CPU configuration error or invalid CPU detected before graphics card initial-ized. | 1. Upgrade the BIOS to proper ver-sion. 2. Change the processor. |
| 1 short beep followed by a one second pause | No optical drive found. | 1. Check cable connections. 2. Run the Computer Setup utility and ensure the device port is enabled. |
| 2 short beeps followed by a three second pause | No CD found. | 1. Check the type of drive that you are using and use the correct media type. 2. Replace the CD with a new one. |
| 3 short beeps followed by a three second pause | Flashing not ready (missing utility or BIOS image file, etc.) | Upgrade the BIOS to proper version. |
| 4 short beeps followed by a three second pause | Flashing operation has failed (checksum error, corrupted image, etc.) | 1. Verify the correct ROM. 2. Flash the ROM if needed. 3. If an expansion board was recently added, remove it to see if the prob-lem remains. 4. Clear CMOS. 5. If the message disappears, there may be a problem with the expansion card. 6. Replace the system board. |
| 5 short beeps followed by a three second pause | BIOS recovery was successful | No action required. |

Password Security

Resetting the password jumper

1. Shut down the operating system properly, then turn off the computer and any external devices, and disconnect the power cord from the power outlet.
2. With the power cord disconnected, press the power button again to drain the system of any residual power.
3. Remove the access panel.
4. Locate the header and jumper labeled **CLEAR PW**.
5. Remove the jumper from pins 2 and 3. Place the jumper on pins 1 and 2.
6. Replace the access panel.
7. Reconnect the external equipment.
8. Plug in the computer and turn on power. Allow the operating system to start. This clears the current passwords and disables the password features.
9. To establish new passwords, repeat steps 1 through 4, replace the password jumper on pins 2 and 3, then repeat steps 6 through 8. Establish the new passwords in Computer Setup. Refer to the *Computer Setup (F10) Utility Guide* for Computer Setup instructions.

Resetting the CMOS jumper

1. Turn off the computer and any external devices, and disconnect the power cord from the power outlet. The power must be disconnected from the system to clear CMOS.
2. Disconnect the keyboard, monitor, and any other external equipment connected to the computer.
3. Remove the access panel.
4. Locate the header and jumper labeled **CLEAR CMOS**.
5. Remove the CMOS jumper from pins 2 and 3 and put the jumper on pins 1 and 2. This clears CMOS.
6. Put the jumper back on pins 2 and 3.
7. Replace the access panel.
8. Reconnect the external equipment.
9. Plug in the computer and turn on power.

NOTE: Use Computer Setup to reset any special system setups along with the date and time.

For instructions on Computer Setup, see the *Computer Setup (F10) Utility Guide*.

System Setup and Boot

Basic system information regarding system information, setup, power management, hardware, and passwords is maintained in the Setup Utility held in the system ROM. The Setup Utility is accessed by pressing the F10 key when prompted (on screen) to do so during the boot sequence. If the screen prompt opportunity is missed, a restart will be necessary...

Computer Setup Menu

| Heading | Option / Description | |
|----------|--|--|
| Main | System Time | Allows you to set system time. |
| | System Date | Allows you to set system date. |
| | Language | Allows you to select the language. |
| | Floppy Diskette A | Allows you to set to Disabled, 1.44 MB 3.5", Not Installed. |
| | 1st Drive 2nd Drive 3rd Drive* 4th Drive* | Allow you to: Enable/disable port configuration, view capacity, transfer mode. Also allows you to run HDD self-test for selected channel: SMART status check, SMART short self test, SMART extended self test. |
| | System Information | Allows you to view installed memory, memory banks 1-4, BIOS revision, core version, model number, product number, serial number, asset tag (press Enter to change) |
| Advanced | CPU Type | View only. |
| | CPU Speed | View only. |
| | Cache RAM | View only. |
| | Primary Video Adapter | Allows you to select boot display device when more than 2 video options are offered by system: Integrated (Onboard), PCI, PCI-Ex16, PCI-Ex1, Onboard. |
| | SATA Controller | Allows you to disable/enable the SATA controller. |
| | SATA Controller Mode | If SATA1 Controller is enabled, allows you to set the mode to: IDE, AHCI |
| | Onboard LAN | Disable/enable onboard LAN controller. |
| | Onboard LAN Boot ROM | Disable/enable the boot ROM of the onboard LAN chip. |
| | Onboard 1394 | Allows you to disable/enable onboard 1394 port. |
| | Supervisor Password | Allows you to view the supervisor password. |
| | User Password | Allows you to view the user password. |
| | Onboard Audio | Allows you to set the onboard audio to: Enabled, Dis-abled, Auto. |
| | Microphone Input | Allows you to disable/enable the onboard microphone port. |
| | USB Ports | Allows you to disable/enable individual USB ports (USB Port 1 through USB Port 12). |
| | Change Supervisor Password | Allows you to change the supervisor password. |
| Power | After AC Power Fail-ure | Allows you to select system restart behavior after power loss: Stay off, Power on, Auto. |
| | NX (No Execute) | Disable/enables the processors NX feature. |
| | Virtualization Tech-nology | Disable/enable. |
| | S5 Maximum Power Savings | Disables/enables S5 Maximum Power Savings. Enabling this feature reduces the power of this system as much as possible in the S5 state. This feature must be disabled if you want to enable Wake on LAN from S5. |
| | Wake on LAN from S5 | Disables/enables limited Wake on LAN from S5. Note that the computer can only wake from S5 during a nor-mal shutdown event. The S5 Maximum Power Savings feature must be disabled in order to enable limited Wake on LAN from S5. |
| Boot | Boot-time Diagnostic Screen | Disable/enable POST diagnostic messages display. |
| | Esc: Boot Menu | Disables/enables POST Esc: Boot Menu message dis-play, |
| | F9: Diagnostics | Disables/enables POST F9: Diagnostics message dis-play, |
| | F10: Setup | Disables/enables POST F10: Setup message display, |
| | F11: Recovery | Disables/enables POST F11: Recovery message display, |
| | F12: Boot from LAN | Disables/enables POST F12: Boot From LAN message display, |
| | (Boot Device Priority) 1st Boot Device, 2nd Boot Device, 3rd Boot Device, 4th Boot Device | Allows you to specify which device groups will boot first, second, third, and fourth or to disable any of the four: CD-ROM group, Hard drive group, Floppy group, Network boot group. MS-DOS drive lettering assignments maybe apply after a non-MS-DOS operat-ing system has started. |
| | Floppy Group Boot Priority | Specifies boot device priority within removable devices. |
| | CD-ROM Boot Prior-ity | Specifies boot device priority within CD/DVD drives. |
| | Hard Drive Boot Pri-ority | Specifies boot device priority within hard drives. |
| | Network Group Boot Priority | Specifies boot device priority within bootable network devices. |
| | | |
| Exit | Exit Saving Changes | Press Enter to exit saving changes. |
| | Exit Discarding Changes | Press Enter to exit discarding changes. |
| | Load Setup Defaults | Press Enter to load setup defaults. |
| | Discard Changes | Press Enter to discard changes. |
| | Save Changes | Press Enter to save changes. |